QUALCOMM INCORPORATED

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June 18, 1998

Via Federal Express

Docket Clerk
U.S. DOT Dockets
Room PL-401
400 Seventh Street, SW
Washington, D.C. 20590-0001

Re: Docket No. FHWA 98-3706-24

Dear Sir or Madam:

Please find enclosed a submission for FHWA Docket No. 98-3706 regarding Hours of Service; Supporting Documents.

Sincerely,

Marc L. Sands

Marc L. Sands
Vice President and Division Counsel
OmniTRACS Division

BEFORE THE

DEPARTMENT OF TRANSPORTATION

FEDERAL HIGHWAY ADMINISTRATION

DOCKET NO. FIWVA-98-3706

HOURS OF SERVICE OF DRIVERS;

SUPPORTING DOCUMENTS

COMMENTS OF

QUALCOMM INCORPORATED

Submitted by:

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Dated: June 17, 1998

INTRODUCTION

QUALCOMM Incorporated submits these comments on the notice of proposed rulemaking which appears at 63 Fed. Reg. 19457 (April 20, 1998) issued by the Federal Highway Administration ("FHWA").

Headquartered in San Diego, California, QUALCOMM develops, manufactures, markets, licenses, and operates advanced communications systems and products based on its proprietary digital wireless technologies. One of the company's primary product areas is the OmniTRACS® System which is a geo-stationary satellite-based, mobile communications system providing two-way data and position reporting services. QUALCOMM markets and sells the equipment, software and service of the OmniTRACS System to the transportation industry in the United States and through authorized resellers in Canada, Mexico, Brazil, Europe, Japan, Malaysia and Korea. Currently, QUALCOMM has approximately 800 motor carrier customers in the United States with approximately 185,000 mobile terminals installed on trucks.

Since the introduction of QUALCOMM's OmniTRACS mobile communications system in 1988, leading motor carriers have recognized the value of mobile communications and tracking systems to increase equipment utilization, revenue miles, and driver quality of life. In addition to the inherent advantages of mobile communications and tracking, QUALCOMM and other mobile communications providers such as HighwayMaster and AMSC, are providing products that allow motor carriers to better utilize their resources with information reporting applications that leverage use of the mobile communications and positioning data. Some examples are

driver and vehicle performance data reporting applications, ETA and out-of-route calculations, state mileage and fuel tax calculation, trailer monitoring, and on-board personal communications for drivers to maintain contact with family and friends while on the road.

The use of advanced mobile communications and tracking systems and the emerging applications that use the mobile unit's generated data, have improved safety, energy efficiency and environmental quality in the transportation industry. [1] The use of these systems has resulting benefits for the U.S. economy through improved utilization of our highway system and more efficient transportation of freight. Therefore, the voluntary use of these systems should be encouraged.

In that use of mobile communications and tracking systems by the trucking industry is still an emerging technology that is being voluntarily implemented, proposed regulatory changes should take into account whether their effect is likely to be an incentive or disincentive for motor carriers to invest in advanced technology. QUALCOMM supports FHWA's encouragement of the use of electronic record keeping methods as an alternative to paper record keeping and FHWA's proposals for more flexible rules for motor carriers to devise effective self-monitoring systems that may include use of mobile communications and tracking systems. However, as more fully described below, QUALCOMM recommends that the final rules include further amendments to avoid potential disincentives to trucking companies to invest in and use mobile communications systems and other advanced technology.

SUPPORTING DOCUMENTS DEFINITION

QUALCOMM supports the proposed amendment to 49 CFR 390.31(d) that will make it easier for motor carriers to use automated, laser and electronic technologies for record keeping storage of supporting documents. This amendment will assist those carriers that elect to voluntarily use records generated from mobile communications systems or other advanced technology in lieu of paper supporting documents and Records of Duty Status (RODS).

The proposed 49 CFR 395.2 definition for supporting documents, however, opens up the potential for creating disincentives to investment in advanced technology systems by including global positioning reports, on-board computer reports and transponder reports as supporting documents. Including data generated from advanced technology as supporting documents creates the potential for an uneven playing field for motor carriers that invest in technology compared to those carriers who do not elect to invest in technology for three reasons.

First, under the proposed rules if the FHWA determines that a motor carrier's self-monitoring system to verify the accuracy of drivers' RODS is ineffective, FHWA can make a demand for additional supporting documents (which would include electronic records) or require the motor carrier to collect and maintain all supporting documents. If a motor carrier's self-monitoring system is found to be ineffective, the motor carrier will be faced with either involuntarily being required to collect, retain and make its electronic records available or to discontinue use of the technology. This rule subjects motor

[1] As an example, QUALCOMM's OmniTRACS System was awarded the Secretarial Award for Excellence in Transportation Technology Research and Development by the Department of Transportation in March 1995.

carriers with advanced technology to compliance review based on electronic records for HOS compliance unlike motor carriers who have not invested in advanced technology and therefore have no such records.

Secondly, in the event a motor carrier does not have a self-monitoring system or is found to not have a self-monitoring system, the motor carrier is required to maintain all supporting documents. Data generated from global positioning, on-board computers or transponders would not otherwise exist but for the motor carrier's voluntary decision to use the technology. Thus, this rule imposes a greater record keeping burden on motor carriers without self-monitoring systems who invested in technology than motor carriers without self-monitoring systems that have not invested in advanced technology.

Thirdly, use of electronic records generated from advanced technology for compliance review when these records are not part of the motor carrier's safety operations, creates an uneven playing field with FHWA. If an inspector uses technology generated information to evaluate the effectiveness of a motor carrier's self-monitoring system, it will be inherently unfair if the motor carrier is managing safety and its operations using non-technology generated information. Just because technology generated information may exist from use of the technology for a different business purpose (such as mobile communications), does not necessarily mean that it can easily be used for HOS compliance monitoring for the motor carrier's operations. Use of technology generated information for monitoring the accuracy of RODS and HOS compliance involves not only the decision of the motor carrier to use it for that purpose. The motor carrier must address significant implementation issues, such as the motor

carrier's technical capability, ability to invest in the expense of implementation, cost justification, and ability to change business practices to use technology.

QUALCOMM recommends that the supporting documents definition not include electronic information generated from mobile communications systems and other advanced technology such as on-board computers and transponders unless the motor carrier has elected to voluntarily use the technology generated information for HOS enforcement in a self-monitoring system. QUALCOMM further recommends that the final rules define criteria for evaluating if self-monitoring systems are "effective" or "presumptively effective". With defined criteria, it will be less likely that motor carriers will be subject to an uneven playing field from use of electronic records in evaluating the performance of self-monitoring systems.

SELF-MONITORING SYSTEMS

QUALCOMM supports the proposal to allow motor carriers to voluntarily use advanced technology (such as mobile communications and tracking systems) for automated self-monitoring systems in lieu of paper-based self-monitoring systems. QUALCOMM further supports FHWA's proposal for use of waivers to permit the use of other alternative systems that do not meet FHWA's specific requirements but which offer compensating features that produce safe practices and results. The availability of waivers on a case-by-case basis allows for development and evaluation of a variety of alternative systems using current and future technologies for HOS monitoring and record keeping.

With human error there will be inherent discrepancies in using electronic records generated by a technology system to support driver generated paper RODS. To

encourage use of electronically generated records to validate paper RODS will necessitate regulations and compliance reviews procedures that recognize reasonable thresholds for error and discrepancies when comparing records generated by electronic systems with those generated by individuals.

Voluntary use of automated technology to produce electronic generated RODS as a replacement for manually generated paper RODS, is a more challenging goal. It is possible for motor carriers that use mobile communications and tracking technology to develop paperless, self-monitoring systems as contemplated in the FHWA pilot demonstration project issued March 25, 1998. (63 Fed. Reg. 16697). Werner Enterprises recently announced its participation in the FHWA pilot project with a paperless log system it developed using mobile communications and tracking data generated with the OmniTRACS System. QUALCOMM is pursuing development for a commercially available product for use with the OmniTRACS System that motor carriers could use to monitor HOS and electronically generate RODS as an alternative to current paper systems. These systems would improve efficiency and accuracy, reduce record keeping expenses and allow for more proactive fleet management to improve HOS compliance and safe driving practices. These systems could provide not only automated record keeping at the carrier's dispatch facility, but allow access to records by roadside inspectors. Upon the request of the roadside inspector to review the driver's log, the driver could send in a message request over its mobile communications system requesting an eight day re-cap of hours report. The recap of hours report could be sent near real-time via the mobile communications system and displayed on the on-board display unit for the inspector, or faxed to a designated fax number (such as at a weigh station).

It is important to understand, however, that currently used mobile communications systems can not easily replace manual logs. Further product development is required and substantial investment is necessary from motor carriers, for electronic information from mobile communications systems to be used as a replacement for paper RODS.

SUPPORT FOR EMERGING TECHNOLOGIES

Use of mobile communications systems is still an emerging technology in the trucking industry in the United States.[2] Concerns regarding enforcement use of information generated by advanced technology systems, not only creates a disincentive for motor carriers from investing in the base mobile communications system but from investing in other applications that can leverage use of the mobile data. For example, motor carriers have been reluctant to invest in automated state mileage and fuel tax applications out of concern that generating these electronic mileage records will make them available for use in compliance reviews or that they may be required to collect and maintain them as supporting documents for RODS.

Use of mobile communications and tracking technology in applications for HOS compliance monitoring or to produce automated electronic RODS for use in lieu of manually generated paper RODS is even less developed. The OmniTRACS System and other mobile communications and positioning systems were not designed for use as automatic on-board recording devices as described in the current rules (49 CFR 395.15).

[2] Out of the approximately 422,000 motor carriers subject to the HOS rules, QUALCOMM, as the leading mobile communications and tracking provider, has approximately 800 customers. Currently, out of the 2.9 Million Class 6, 7 and 8 vehicles in the U.S., we estimate that there are approximately 250,000 over the

The paperless log system deployed by Werner Enterprises took substantial development and resources on its part over a three-year period to utilize its mobile communications and tracking data as part of a paperless self-monitoring system.

Currently, applications for use of these emerging technologies for HOS monitoring are not sufficiently available or mature to be widely adopted. For these automated solutions to be commercially available and cost-effective for midsize and small motor carriers, trucking technology suppliers will have to make substantial investments in product development and motor carriers will have to be willing to make the purchase and implementation investment. These investments will only occur, if motor carriers are not reluctant to adopt use of these systems for fear that they may be unfairly used against them by enforcement agencies.

If a long-term objective is for more motor carriers to voluntarily use automated, electronic self-monitoring systems, the final rules should be crafted to avoid disincentives for motor carriers to voluntarily invest in advanced technology for other business purposes. With more widespread use of advanced technology, alternative technology-based applications will become more available and accessible for voluntary implementation by motor carriers in self-monitoring systems that are in lieu of conventional supporting documents and RODS. Further automation of these processes and utilization of mobile communications systems and other advanced technology for other purposes will ultimately benefit not only the motor carriers but all highway users, with more efficient transportation of freight and safer motor carrier operations.

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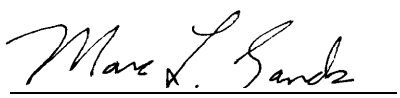
road tractors installed with mobile satellite and cellular communications and tracking systems. (Estimate of the approximate installed base of the three leading providers, QUALCOMM, HighwayMaster and AMSC).

QUALCOMM appreciates the opportunity to comment on this proposed rulemaking. If there are any questions regarding the above comments, please contact the undersigned.

Respectfully submitted,

QUALCOMM Incorporated



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